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| 09/676,645 | 09/29/2000 | Makoto Yamada | 450100-02736 | 3220 |

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| EXAMINER | |
|---|---|
| NGUYEN, HUY THANH | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/676,645 | YAMADA ET AL. | |
| | Examiner | Art Unit | |
| | HUY T. NGUYEN | 2621 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *02 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-5, 7 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatomi et al (6,263,152) in view of Inai (JP 09288677 A, US 6,055,565, is a family member of JP 09288677 A and is used as English translation for JP 09288677 A) and Yonemitsu et al (EP 0858171 A2) .

Regarding claim 1, Hisatomi discloses a recording apparatus (Fig. 15) for recording video data and audio data to a writable optical disc (DVD-RAM), comprising:

encoding means (53) for encoding video data corresponding to a compression-encoding process (column 12, lines 30-51, column 15, lines 35-52);

converting means for converting the data structure of the encoded video data received from said encoding means into a file structure that allows a moving picture to be synchronously reproduced (Fig. 24, column 16, lines 19-38) ;

recording means for recording data having the file structure to an optical disc, wherein the file structure has a first data unit (sector or pack) and a second data unit (object unit) (Fig.13) , and wherein the first unit second data unit are matched with a successive record length ( pack unit length and object unit length Fig. 13 and Fig. 24) which data is written to the optical disc; and

reproducing means for synchronously reproducing the audio data and moving picture (column 16, lines 19-38).

Hisatomi further teaches each second data unit adjacent to the first data unit (a object unit adjacent to a pack unit of other object unit , Fig. 13)

Hisatomi fails to specifically teach that the moving picture and/or audio signal are synchronously reproduced by a computer software without need to use especially dedicated hardware. Inai teaches using a computer software to synchronously reproduced the moving picture and audio without need to use specially dedicated hardware (column 10, lines 3-40, column 11, lines 1-20). Therefore it would have been obvious to one of ordinary in the at to modify Hisatomi with Inai by using

computer software as taught by Inai with the optical disc of Hisatomi to synchronously reproducing the moving or audio data the enhancing data structure file use with a computer that do not have specifically dedicated decoding hardware .

Hisatomi as modified with Inai fails to specifically teach that the encoding rate is lower than a transfer rate when the data is read.

Yonemitsu teaches a recording apparatus in which having a rate control means for intermittently read the data and the data having rate higher than encoding rate in order to improve the quality of the data due to condition of the apparatus (page 4, lines 50-55) . I would have been obvious to one of ordinary skill in the art to modify Hisatomi as modified with Inai with Yonemitsu by using a rate control means with the apparatus of Hisatomi as modified wit Inai for controlling the rate of the read data thereby improving the quality of the data .

Further for claim 2, Hisatomi a further teaches converting the audio data into the file structure (column 12, lines 40-41).

Further for claim 3, Hisatomi further teaches the video encoding means for encoding video data corresponding to a compression-encoding process in a combination of an inter-frame predictive encoding process and a motion compensating process that allow a plurality of frames are structured as a group (MPEG encoding, (column 12, lines 30-51, column 15, lines 35-52);

audio output means (54) for outputting audio data that has been compression-encoded or non-compressed (column 12, lines 40-51);

multiplexing means (56) for converting the data structure of the encoded video data received from said encoding means and the data structure of the audio data received from said audio output means into respective file structures (Fig. 24 , column 13, lines 1-3, lines 30-58) that allow a moving picture to be synchronously reproduced .

Regarding claim 4, Hisatomi further teaches that in the multiplexed data, the duration of the encoded video data of the second data unit is almost equal to the duration of the audio data of the second data unit since the video pack has equal bytes with the audio pack (column 13, lines 44-50).

Regarding claim 5, Hisatomi further teaches that wherein in the multiplexed data, the encoded video data of the second data unit and audio data of the second data unit are alternately arranged, and wherein a plurality of sets of the encoded video data of the second data unit and the audio data of the second data unit are matched with the successive record length since each object unit comprise a plurality of video sets and audio sets (Figs. 5, 24) .

Method claims 9-11 corresponds to apparatus claims 1-3, therefore method claims 9-11 are rejected by the same reason as applied to apparatus claims 1-3.

Further for claims 12-14, Hisatomi as modified with Inai further a medium having a program read by a computer for performing the steps being recited in claims 12-14 correspond to apparatus claims 1-3 since Hisatomi teaches using a program used with a computer or processor to perform the steps of encoding, formatting and recording the moving picture and /or audio data (Figs. 17 and 19) and Inai teaches

using a computer software for synchronously reproducing the moving picture and audio data (column 10, line 30 to column 11, line 20).

Regarding claims 7 and 16, Hisatomi further teaches that the file structure further includes a data portion that describes management information, and wherein the data portion describes the number of the second data units (object number ) contained in the successive record length (Figs. 25,28 and 29).

3. Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatomi et al (6,263,152) in view of Inai (JP 09288677 A, US 6,055,565, is a family member of JP 09288677 A and is used as English translation for JP 09288677 A) and Yonemitsu et al (EP 0858171 A2) as applied to claim 1 above , further in view of Kanota et al (6,813,681).

Regarding claims 6 and 15, Hisatomi as modified with Inai fails to teach that the audio the audio data is compression-encoded corresponding to ATRAC, and wherein the first data unit of the file structure contains one or a plurality of sound units. Kanota teaches means for compression –encoded audio data to ATRAC units (column 11, lines 47-53). It would have been obvious to one of ordinary skill in the art to modify Hisatomi with Kanota by using a ATRAC audio compressing mean as taught by Kanota with the apparatus of Hisatomi as an alternative to the encoding means of Hisatomi for compression -encoding the audio data .

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatomi et al (6,263,152) in view of Inai (JP 09288677 A, US 6,055,565, is a family member of JP 09288677 A and is used as English translation for JP 09288677 A) and Yonemitsu et al (EP 0858171 A2) as applied to claim 1 above , further in view of Kikuchi et al (6,570,837).

Regarding claim 8, Hisatomi further teaches that the file structure further includes a data portion that describes management information and the data portion describes a flag and the number of sets contained in the successive record length (Figs. 13, 25,28 but fails to specifically teaches that the flag representing whether or not sets of encoded video data and audio data of the second data unit have been recorded in the data portion.

Kikuchi teaches using flags in a management for indicating whether or not a set of information is recorded on a medium (fig. 7, column 9, lines 55-65). Therefore, it would have been obvious to one of ordinary skill in the art to modify Hisatomi as modified with Inai with Kikuchi by using flags with the data portion to indicate whether or not the video or audio units are recorded in the portion of a medium in order to accurately accessing the video or audio data .

***Response to Arguments***

5. In this office action US patent 6,055,565 to Inai is used as English translation for the Japanese publication JP 09288677A.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T. NGUYEN whose telephone number is (571) 272-7378. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

H.N

HUY NGUYEN
PRIMARY EXAMINER